# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re application of: Benuzzi | ) | Examiner: | Flores Sanchez, Omar |
| **Serial No.: 09/367,244** | ) | Art Unit: | 3724 |
| Filed: 08/10/1999 | ) | Conf. No.: | 4118 |
| For: METHOD AND MACHINE FOR SAWING PANELS WITH LATERALLY MOVABLE PUSHER | ) | | |
| Attorney Docket No.: BUG2106 | ) | | |

## 37 C.F.R. § 41.37 – APPELLANT'S BRIEF

**MAIL STOP APPEAL BRIEF - PATENTS**
Commissioner for Patents
Alexandria, VA 22313-1450

This appeal brief is based upon the Notice of Appeal filed March 3, 2008.

| CERTIFICATE OF ELECTRONIC TRANSMISSION | |
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| I hereby certify that this correspondence (and any item referred to herein as being attached or enclosed) is (are) being transmitted to the USPTO by electronic transmission via EFS-Web on the date indicated below. | |
| Date: July 3, 2008 | Caroline A. Schweter |

**Real Party in Interest - 37 C.F.R. § 41.37(c)(1)(i)**

The real party in interest is the assignee, GIBEN INTERNATIONAL S.P.A. The assignment document was recorded in the Office at location REEL/FRAME 020525/0058 on 02/19/2008.

**Related Appeals and Interferences - 37 C.F.R. § 41.37(c)(1)(ii)**

None.

**Status of Claims - 37 C.F.R. § 41.37(c)(1)(iii)**

Status of claims:

- pending claims: 5, 6, 19, 20
- canceled claims: 1-4, 7-18
- allowed claims: none
- rejected claims: 5, 6, 19, 20
- claims being appealed: 5, 6, 19, 20

**Status of Amendments - 37 C.F.R. § 41.37(c)(1)(iv)**

There are no amendments that were filed after final rejection.

**Summary of the Claimed Subject Matter - 37 C.F.R. § 41.37(c)(1)(v)**

**Independent Claim 5**

Independent claim 5 defines a panel sawing machine (Fig. 1, #1) comprising a horizontal table (Fig. 1, #5) to support at least one panel (Fig. 1, #3a,3b) to be cut (application page 4, lines 20-21). At least one movable device (Fig. 1 & 2, #6) is designed to move the panel (Fig. 1, #3a,3b) along the table (Figs. 1 & 2, #5) in at least one of a feed direction (Fig. 1, #F) and in a direction (Fig. 1, #F1) opposite to the feed direction, in such a way as to feed a sawing device (Fig. 1, #7), and the sawing device is designed to cut the panel(s) (Fig. 1, #3a,3b) into two or more smaller boards (Fig. 1, #4a,4b) in a direction at right angles to the feed direction (Fig. 1, #F) (application page 5, lines 8-18). The movable device (Figs. 1 & 2, #6) includes first drive means (Figs. 1 & 2, #36, 36a, 36b – application page 6, lines 23-33), second drive means (Fig. 2, #15b, 38b – application page 8, lines 1-10) and a plurality of pickup elements (Figs. 1 & 2, #16 – application page 5, line 31 – page 6, line 2;) mounted on the movable device (Figs. 1 & 2, #6) side-by-side to hold a rear edge of the panel(s) (Fig. 1, #3a,3b) in position while the panel(s) is/are being sawn. At least first and second pickup elements (Figs. 1 & 2, #16) of said plurality of pickup elements are both movable by said first drive means (Figs. 1 & 2, #36, 36a, 36b) bi-directionally relative to the movable device (Figs. 1 & 2, #6) laterally at right angles relative to said feed direction (Fig. 1, #F) (application page 6, lines 14-19) and said first and second pickup elements (Figs. 1 & 2, #16) are both movable by said second drive means (Fig. 2, #15b, 38b) relative to the movable device (Figs. 1 & 2, #6) in said feed direction and a direction opposite the feed direction (application page 8, lines 1-5).

**Discussion of Claim 5 Means Plus Function Limitations**

As detailed at application page 6, lines 23-33, the first drive means (Figs. 1 & 2, #36) comprises, e.g., a helical guide (Figs. 1 & 2, #36a) integral with the movable device crossbeam (Figs. 1 & 2, #6) and engaged by a power-driven unit including a lead screw (Figs. 1 & 2, #36b). As described at page 8, lines 1-10, the second drive means (Fig. 2, #38a) comprises, e.g., a third guide (Fig. 2, #15b) and a drive unit (Fig. 2, #38b).

**Independent Claim 19**

Independent claim 19 defines a panel feeding machine (Fig. 1, #1) including a support surface (Figs. 1 & 2, #5) (application page 4, lines 20-21). A movable device (Figs. 1 & 2, #6) is provided for moving associated wood panels (Fig. 1, #3a,3b) on the support surface (Fig. 1, #5) in a first direction (Fig. 1, #F) toward an associated sawing device (Fig. 1, #7) and in a second direction (Fig. 1, #F1) opposite the first direction away from the associated sawing device (Fig. 1, #7) (application page 5, lines 8-16). A plurality of pickup elements (Fig. 1, #16) are mounted on the movable device (Figs. 1 & 2, #16) and each is selectively operable between an opened position and a gripping position (application page 5, line 31 – page 6, line 2). The pickup elements (Figs. 1 & 2, #16) are adapted to selectively grip and retain associated wood panels (Fig. 1, #3a,3b) located on the support surface (Figs. 1 & 2, #5) when in the gripping position and adapted to release associated wood panels located on the support surface when in the opened position (application page 5, line 31 – page 6, line 2). At least a first pickup element of said plurality of pickup elements (Fig. 4f, #161) is movable relative to the movable device (Figs. 1 & 2 & 4f, #6) in both the first and second opposite directions (Fig. 1 & 4f, #F, F1) when the first pickup element is in the gripping position (Fig. 4f, #161) (see Figs. 4e & 4f; application page 9, lines 12-16; see Figs. 4q & 4r; application page 10, lines 23-27).

**Grounds of Rejection to be Reviewed on Appeal - 37 C.F.R. § 41.37(c)(1)(vi)**

**Claims 5 & 6**

Whether claims 5 and 6 are unpatentable under to 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,392,401 to Ess in view of U.S. Patent No. 5,701,791 to Schulze et al.

**Claims 19 & 20**

Whether claims 19 and 20 are unpatentable under to 35 U.S.C. § 103(a) based upon U.S. Patent No. 5,701,791 to Schulze et al. in view of U.S. Patent No. 4,392,401 to Ess.

**Argument - 37 C.F.R. § 41.37(c)(1)(vii)**

**Whether claims 5 and 6 are unpatentable under to 35 U.S.C. § 103(a) based upon U.S. Patent No. 4,392,401 to Ess in view of U.S. Patent No. 5,701,791 to Schulze et al.**

**Independent Claim 5**

Independent claim 5 specifies that at least first and second pickup elements (16) are movable by the first drive means bi-directionally relative to the movable device (6) laterally at right angles relative to the feed direction (F), and also that the first and second pickup elements (16) are both movable by the second drive means relative to the movable device (6) in the feed direction (F) and a direction (F1) opposite the feed direction.

This feature is shown, e.g., in Figs. 4a-4f and described at page 8 line 31 – page 9 line 16. It can be seen in Figs. 4a – 4f that the pickup elements (16) are carried on the movable device (6), and the movable device (6) moves back and forth in the feed direction (F) and opposite direction (F1). In Figs. 4a-4c, the pickup elements (16) are gripping a single panel that is cut with a first trimming cut (T1) and main lengthwise cut (T2) and a another trimming cut (T3). As shown in Fig. 4d-4f, the pickup elements (16) are moved

laterally at right angles to the feed direction (F) so as to be closer together, and in Fig. 4f, it can be seen that one of the pickup elements (noted with 161) is moved *relative to the movable device (6)* in the feed direction (F) to change the relative alignment of the panels for the cutting operation (T5).

The Examiner cites to the Ess document ("Ess" - U.S. Patent No. 4,392,401) as disclosing a horizontal table (12), at least one movable device (15), a feed direction and opposite direction, a sawing device (10), and a plurality of pickup elements (17) mounted on the movable device. The Examiner acknowledges that Ess doesn't disclose the claimed first drive means and second drive means for moving the pickup elements relative to the movable device.

On page 2 of the final Office action dated 10/02/2007, the Examiner contends that the Schulze et al. document ("Schulze" – U.S. Patent No. 5,701,791) discloses "use of first drive means 16 and second drive means 27 (see col. 6, lines 64-67) for the purpose of allowing accelerated processing of the workpiece."

Applicant's representative respectfully contends that the Examiner's interpretation of Schulze is erroneous. Element 16 of Schulze is a motor that moves the entire cross rail 14 transversely (FIG. 2, direction 15), *but the workpiece clamps 20 are not movable transversely relative to the cross rail 14*. In other words, the rail 14 and clamps 20 *move together as a unit in the cross direction 15*, but the clamps 20 cannot move relative to the rail 14 (see e.g., Schulze, col. 6, lines 15-19). At col. 6, lines 20-21, Schulze clearly states that the clamp housings 19 for the clamps 20 are "rigidly connected to the cross rail 14."

The piston (27) of Schulze (cited by the Examiner as a "second drive means" does move the workpiece clamp 20 relative to the guide housing (19), but only in the direction (12) of Fig. 2. Each workpiece clamp 20 is fixed in position on the cross rail 14 insofar as its lateral position is concerned, i.e., the clamps 20 can move individually relative to the

cross rail (14) in the direction (12 - see FIG. 2 of Schulze), but cannot move relative to the cross rail (14) in the direction (15 - see FIG. 2 of Schulze). As such, Ess in view of Schulze fails to disclose or fairly suggest the development defined in independent claim 5, and the applicant respectfully submits that claim 5 is patentable over Ess in view of Schulze.

**Dependent Claim 6**

Dependent claim 6 further specifies that at least one of the first and second pickup elements (16) is also movable up and down in a vertical direction (Z) relative to the movable device. On page 3 of the final Office action mailed 10/02/2007, the Examiner states that "the pickup elements 43 of Schulze et al. are movable up and down in a vertical direction by clamping piston 40."

The applicant's representative respectfully traverses the Examiner's position. As shown in Fig. 3 and described at col. 7, lines 30-36 of Schulze, each workpiece clamp 20 of Schulze has upper and lower jaws 43,46. A clamping piston 40 controls pivoting opening and closing of the upper jaw 43 relative to the lower jaw 46. Although the upper jaw 43 pivots to and between the opened and closed positions relative to the cross rail 14, the clamp 20, itself, is always in a fixed vertical position relative to the cross rail 14. As such, it is respectfully submitted that Schulze does not disclose or suggest the additional limitation of claim 6, that at least one of the first and second pickup elements (16) is also movable up and down in a vertical direction (Z) relative to the movable device (6). It is noted that movement of the upper jaw 43 only of Schulze cannot be deemed movement of a "pickup element" as defined in claim 6 because both the upper and lower jaws 43,46 of Schulze are required to grip a workpiece (5). Accordingly, claim 6 is also submitted to be patentable over Ess in view of Schulze.

**Whether claims 19 and 20 are unpatentable under to 35 U.S.C. § 103(a) based upon U.S. Patent No. 5,701,791 to Schulze et al. in view of U.S. Patent No. 4,392,401 to Ess.**

**Independent Claim 19**

Independent claim 19 defines a panel feeding machine including a movable device for moving associated wood panels on the support surface in a first direction toward an associated sawing device and in an opposite second direction away from the associated sawing device. A plurality of pickup elements are mounted on the movable device and each is selectively operable between an opened position and a gripping position. At least a first one of the pickup elements is movable relative to the movable device in both the first and second opposite directions when the first pickup element is in its gripping position.

As such, a wood panel being gripped by such first pickup element is movable on the support surface *relative to the movable device, itself,* by moving the first pickup element in the first and/or second direction *while the first pickup element is gripping the wood panel.*

The Schulze document discloses that at least one of the clamps 20 can move inward and outward relative to the cross arm 14 (in direction 12 of FIG. 2), *but this can only occur when the clamp is opened (not gripping the workpiece).* This is clearly explained at col. 6, lines 32-54 of Schulze which read as follows:

> As can be seen from FIG. 2, continuous processing of the edges of the sheet metal workpiece 5 is possible only if the individual holding devices 20 are temporarily removed from the workpiece 5. Only then is the area otherwise covered by a holding device 20 accessible for punching by the punch 8 on the tool head 7.
>
> If the workpiece 5 is moved by the cross rail 14 as seen in FIG. 2, the switching element 22 of the lower clamp 20 adjacent to the tool head 7 abuts the dead-zone stop 21. As a result, this clamp 20 is opened and moves relative to the

> workpiece 5 and the accompanying guide housing 19 in the direction of the cross rail 14 by action of the piston 33 as seen in FIG. 3. This pulled back or remote position of the clamp 20 is maintained until the switching element 22 no longer abuts the dead-zone stop 21. During this time, the workpiece 5 is engaged with the workpiece guide assembly 4 by other clamps 20. As soon as the cross rail 14 has moved the lower clamp 20 in FIG. 2 away from the tool head 7 of the punch press to a distance preset by the dead-zone stop 21, contact between the switching element 22 and the dead-zone stop 21 ends, and the clamp 20 is moved back into its starting position on the workpiece 5 and is engaged with it.

The purpose of this aspect the Schulze device is to disengage one or more clamps 20 from the workpiece and move such clamp(s) 20 out of the way so that the punch 8 can process the portion of the workpiece previously held by that clamp 20, without the clamp 20 interfering with such processing, while the other clamps 20 grip and retain the workpiece 5. After the subject region is processed, the disengaged clamp(s) reengage the workpiece 5. This is also clearly described in the abstract of Schulze, "As soon as the holding device [clamp 20] reaches the limit of the danger zone around the tool head, it is switched into a setting *releasing the workpiece* and moves into a position away from the work station."

Ess is cited for disclosure of a sawing device, but it does not disclose or suggest any movement of its clamps 17 as recited in claim 19 (nor does the Examiner contend that it does).

The applicant respectfully submits that Schulze in view of Ess does not disclose or render obvious the device defined in claim 19, and allowance of claim 19 is respectfully requested.

**Dependent Claim 20**

Dependent claim 20 specifies that both first and second pickup elements are movable in the first and second directions relative to the movable device while in the gripping position. As such, the arguments made above regarding claim 19 also apply to claim 20, with the additional argument that because claim 20 specifies that both first and second pickup elements are movable in the first and second directions relative to the movable device while in the gripping position, claim 20 should be patentable for the additional reason that neither Schulze nor Ess discloses even one of their clamps being so movable.

Accordingly, both claims 19 and 20 are also submitted to be in condition for allowance over Schulze and Ess.

## Conclusion

It is submitted that claims 5, 6, 19, and 20 were rejected in error and are in condition for allowance. The applicant respectfully requests that the Board reverse the Examiner's rejection of claims 5, 6, 19, and 20.

Respectfully submitted,

Steven Haas (Reg. No. 37,841)
Fay Sharpe LLP
1100 Superior Avenue, 7th Floor
Cleveland, Ohio 44114
(216)861-5582

Attachments: Claims Appendix / Evidence Appendix / Related Proceedings Appendix

**Claims Appendix - 37 C.F.R. § 41.37(c)(1)(viii)**

5. A panel sawing machine comprising:

a horizontal table to support at least one panel to be cut;

at least one movable device designed to move the panel along the table in at least one of a feed direction and in a direction opposite to the feed direction, in such a way as to feed a sawing device, said sawing device being designed to cut the panel into two or more smaller boards in a direction at right angles to the feed direction, the movable device comprising first drive means, second drive means and a plurality of pickup elements mounted on the movable device side-by-side to hold a rear edge of the panel in position while the panel is being sawn, wherein at least first and second pickup elements of said plurality of pickup elements are both movable by said first drive means bi-directionally relative to the movable device laterally at right angles relative to said feed direction and wherein said first and second pickup elements are both movable by said second drive means relative to the movable device in said feed direction and a direction opposite the feed direction.

6. The machine according to claim 5, wherein at least one of said first and second pickup elements is also movable up and down in a vertical direction (Z) relative to said movable device.

19. A panel feeding machine comprising:

a support surface;

a movable device for moving associated wood panels on the support surface in a first direction toward an associated sawing device and in a second direction away from the associated sawing device, said second direction being opposite said first direction;

a plurality of pickup elements mounted on the movable device and each selectively operable between an opened position and a gripping position, said pickup elements adapted to selectively grip and retain associated wood panels located on the support surface when in the gripping position and adapted to release associated wood panels located on the support surface when in the opened position;

wherein at least a first pickup element of said plurality of pickup elements is movable relative to the movable device in both the first and second opposite directions when the first pickup element is in the gripping position.

20. The panel feeding machine as set forth in claim 19, wherein at least the first and also a second of said pickup elements are both movable in both the first and second directions relative to the movable device while in their respective gripping positions.

**Evidence Appendix - 37 C.F.R. § 41.37(c)(1)(ix)**

None.

**Related Proceedings Appendix - 37 C.F.R. § 41.37(c)(1)(x)**

None.